

AMENDED IN ASSEMBLY SEPTEMBER 2, 2005

AMENDED IN ASSEMBLY AUGUST 30, 2005

AMENDED IN SENATE MAY 27, 2005

AMENDED IN SENATE APRIL 27, 2005

AMENDED IN SENATE MARCH 29, 2005

SENATE BILL

No. 600

Introduced by Senators Ortiz and Perata
(Coauthors: Senators Alquist, Kuehl, and Romero)
(Coauthors: Assembly Members Chan, Koretz, and Pavley)

February 18, 2005

An act to add Chapter 8 (commencing with Section 105440) to Part 5 of Division 103 of the Health and Safety Code, relating to public health.

LEGISLATIVE COUNSEL'S DIGEST

SB 600, as amended, Ortiz. Biomonitoring.

Existing law establishes various programs for the protection of the public from exposure to toxins, including, but not limited to, the Childhood Lead Poisoning Prevention Act, administered by the State Department of Health Services, which imposes a fee upon manufacturers or persons who are responsible for lead contamination and applies the proceeds of the fee to reduction or elimination of the harm caused by the lead contamination.

This bill would require the Division of Environmental and Occupational Disease Control within the department to establish the Healthy Californians Biomonitoring Program to monitor the presence and concentration of designated chemicals, as defined, in Californians.

This bill would require the department and the agency to establish an advisory panel to assist the department and the agency. The bill would establish the Healthy Californians Biomonitoring Fund for deposit of funds, for expenditure by the department and agency upon appropriation by the Legislature, for the biomonitoring program. The bill would require the department to provide public access to information, and to report to the Legislature and the public.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 (a) Chronic disease has reached epidemic proportions in the
4 United States. An estimated 125 million Americans, or 43
5 percent of the population, have at least one chronic illness, while
6 60 million people, or 21 percent of the population, suffer from
7 multiple chronic conditions. Roughly 20 million American
8 children suffer from at least one chronic health problem. Cancer,
9 asthma, birth defects, developmental disabilities, endometriosis,
10 and infertility, are becoming increasingly common, and mounting
11 evidence links incidence and severity of these diseases to
12 exposure to environmental toxicants.

13 (b) Chronic diseases carry enormous costs to California. For
14 example, the estimated total cost of asthma in California is
15 approximately \$1.27 billion annually. For individuals born in
16 1988 with one or more of the 18 most common birth defects,
17 estimated lifetime costs for medical treatment and lost
18 productivity exceed \$1 trillion. Special education for the
19 estimated 1 million California children with learning disabilities,
20 carries an annual price tag of \$12 billion.

21 (c) An estimated 85,000 chemicals are registered for use today
22 in the United States. Another 2,000 chemicals are added each
23 year. Some toxicological screening data exists for only 7 percent
24 of these chemicals. More than 90 percent of these chemicals have
25 never been tested for their effects on human health. Large
26 numbers of these chemicals are found in cosmetics, personal care
27 products, pesticides, food dyes, cleaning products, fuels, and
28 plastics. Because of their ubiquity in modern life, Californians

1 are commonly exposed to multiple chemicals every day. Many of
2 these chemicals persist in the environment, and accumulate and
3 remain in body fat, and have been shown to be toxic.

4 (d) Biomonitoring studies have scientifically demonstrated
5 that human exposure to a multitude of persistent chemicals is
6 both chronic and widespread. The Centers for Disease Control
7 and Prevention has documented the presence of ~~116~~ 148
8 environmental chemicals in the blood and urine of Americans of
9 all ages and races.

10 (e) The presence of toxins in the environment raises special
11 health concerns for California families. The developing fetus is at
12 heightened risk from in utero exposure to harmful chemicals
13 because the neurological, reproductive, and immunological
14 systems of a fetus are still in development. For the same reason,
15 nursing infants are vulnerable because certain persistent toxic
16 chemicals concentrate in body fat and can be transmitted to
17 infants through human milk. It is important to always emphasize
18 that studies conducted on breastfeeding consistently find that
19 human milk is the best choice for maximizing a healthy start in
20 life for infants. There is broad consensus among experts,
21 including, but not limited to, the American Academy of
22 Pediatrics, the American College of Obstetricians, and
23 Gynecologists, the American Academy of Family Physicians, the
24 Academy of Breastfeeding Medicine, the American College of
25 Nurse Midwives, the American Public Health Association, the
26 National Medical Association, the World Health Organization,
27 UNICEF, and the United States Department of Health Services,
28 that mother's milk provides a nursing infant with a stronger
29 immune system, protects the child from illnesses and allergies,
30 provides vital nutrients during critical periods of growth and
31 development, and offers other potential protections against
32 environmental pollutants and pathogens. Therefore, breastfeeding
33 should continue to be promoted as the best infant feeding choice.

34 (f) Biomonitoring data supports public health by establishing
35 trends in chemical exposures, validating modeling and survey
36 methods, supporting epidemiological studies, identifying
37 impacted communities or particularly vulnerable communities,
38 assisting in health responses to unanticipated emergency
39 exposures, assessing the effectiveness of current regulations, and
40 helping to set priorities for reform.

(g) The priority public policy recommendation from the 2002 International Summit on Breast Cancer and the Environment was to establish a national biomonitoring program in the United States.

(h) In September 2001, the Legislature passed Senate Bill 702 (Chapter 538, Statutes of 2001), making California the first state in the nation to begin planning a statewide environmental health tracking network for chronic diseases and environmental hazards and exposures. In followup, the Senate Bill 702 Expert Working Group has recommended the establishment of a statewide biomonitoring program.

(i) The Legislature, therefore, finds and declares that the establishment of a statewide biomonitoring program is necessary to identify the presence of toxic chemicals in individuals and communities, to educate and counsel affected individuals and communities, and to develop strategies to prevent exposures to potentially harmful chemicals. A biomonitoring program will expand biomedical, epidemiological, and behavioral public health research. California, an established leader in health promotion, health policy, and health care delivery and response, should encourage and fund this research, which will contribute to the health and well-being of millions of people.

SEC. 2. Chapter 8 (commencing with Section 105440) is added to Part 5 of Division 103 of the Health and Safety Code, to read:

CHAPTER 8. HEALTHY CALIFORNIANS BIOMONITORING PROGRAM

Article 1. General

105440. (a) This chapter shall be known, and may be cited, as the Healthy Californians Biomonitoring Program.

(b) For the purposes of this chapter, the following terms have the following meanings:

(1) "Department" means the State Department of Health Services.

(2) "Agency" means the California Environmental Protection Agency.

(3) "Director" means the Director of Health Services.

1 (4) “Secretary” means the Secretary for Environmental
2 Protection.

3 (5) “Division” means the Division of Environmental and
4 Occupational Disease Control within the department.

5 (6) “Office” means the Office of Environmental Health
6 Hazard Assessment within the agency.

7 (7) “Biomonitoring” means the process by which the presence
8 and concentration of toxic chemicals and their metabolites are
9 identified within a biospecimen as a means to assess the chemical
10 body burden.

11 (8) “Biospecimen” means a sample taken from a biophysical
12 substance, that is reasonably available within a human body, for
13 use as a medium to measure the presence and concentration of
14 toxic chemicals. “Biophysical substance” includes, but is not
15 limited to, blood, bone, cord blood, fat, hair, human milk,
16 meconium, saliva, and urine.

17 (9) “Panel” means the Healthy Californians Biomonitoring
18 Program Advisory Panel established pursuant to Article 2
19 (commencing with Section 105448).

20 (10) “Community” means geographically or
21 nongeographically based populations that may participate in the
22 biomonitoring program. A “nongeographical community”
23 includes, but is not limited to, populations that may share a
24 common chemical exposure through similar occupations,
25 populations experiencing a common health outcome that may be
26 linked to chemical exposures, or populations that may experience
27 similar chemical exposures because of comparable consumption,
28 lifestyle, or product preferences.

29 (11) “Designated chemicals” means those chemicals that are
30 known to, or strongly suspected of, adversely impacting human
31 health or development, based upon scientific, peer-reviewed
32 animal, human, or in vitro studies.

33 105441. The division in collaboration with the agency shall
34 establish the Healthy Californians Biomonitoring Program. The
35 division is the lead agency for the program unless otherwise
36 specified in this chapter. The program shall utilize biospecimens,
37 as appropriate, to identify toxic chemicals that are present in the
38 bodies of Californians. Biomonitoring shall take place on a
39 strictly voluntary and confidential basis. Results reported
40 pursuant to this chapter shall not disclose individual confidential

1 information of participants. Appropriate biospecimens shall be
2 used to monitor and assess the presence and concentration of
3 designated chemicals.

4 105443. (a) All participants shall be evaluated for the
5 presence of designated chemicals as a component of the
6 biomonitoring process. Participants shall receive a consultation,
7 to explain their results. Providers shall receive training in
8 administering the program in an ethical, participatory, and
9 community-based manner.

10 (b) Communities selected for biomonitoring shall be reflective
11 of the economic, racial, and ethnic composition of the state.
12 Educational and outreach activities and materials used for
13 program participants and communities shall, to the extent
14 possible, be culturally appropriate and translated as needed.

15 105444. (a) The department shall adopt guidelines and model
16 protocols that address the science and practice of biomonitoring
17 to implement this chapter that accomplish all of the following:

18 (1) Ensure confidentiality and informed consent, and
19 communicate findings to participants, communities, and the
20 general public.

21 (2) Emphasize that all aspects of the program are culturally
22 sensitive.

23 (3) Serve as a guide for other biomonitoring programs
24 supported by state funds.

25 (4) For biomonitoring using human milk as a biospecimen,
26 work in consultation with the community that is being
27 biomonitored and with the panel to provide guidelines for
28 community education regarding the importance of breastfeeding
29 so that the program does not have any unintended and
30 unwarranted negative effects upon a parent's decision whether to
31 breastfeed.

32 (5) *When exposure data is communicated to the participant*
33 *during the consultation pursuant to subdivision (a), and when*
34 *exposure data is publicly released, it shall contain the following*
35 *statement:*

36
37 *“Biomonitoring is a process by which the presence and*
38 *concentration of toxic chemicals and their metabolites are*
39 *identified within a biospecimen as a means to assess an*
40 *individual's chemical body burden. The measurement of an*

environmental chemical in a biospecimen does not by itself mean that the chemical causes disease. The toxicity of a chemical is related to its dose or concentration in addition to a person's individual susceptibility. Small amounts may be of no health consequence, whereas larger amounts may cause adverse health effects, or the opposite may also be true, depending on the chemical being studied, the concentration of the chemical, and other related issues. Research studies are required to determine the levels of a chemical that may cause health effects and the levels that are not a significant health concern. More research needs to be done on the synergistic effects of multiple chemical exposures, the timing of the exposure to environmental chemicals, and the long-term cumulative effects of environmental chemicals in the body. Results of a biomonitoring program will help prioritize and foster research and public health policy on human health risks that result from exposure to environmental chemicals. The overall purpose of a biomonitoring program is to provide unique exposure information to scientists, physicians, and health officials to help prevent disease that results from exposure to environmental chemicals."

(b) The department shall consider, and adapt as appropriate, the ~~analytical~~ scientific methods utilized by the federal Centers for Disease Control and Prevention for the studies known collectively as the National ~~Report~~ Reports on Human Exposure to Environmental Chemicals.

(c) The department shall work in collaboration with the California Environmental Health Tracking Program.

(d) Personal information, as defined in Section 1798.3 of the Civil Code, shall not be shared without the written and informed consent of the individual to whom it pertains.

Article 2. The Advisory Panel

105448. (a) The department and agency shall establish the Healthy Californians Biomonitoring Program Advisory Panel. The panel shall be composed of ~~16 members as follows:~~ *eight members in total. The members shall have expertise in public health, environment, epidemiology, biology, environmental*

1 *health, occupational health, maternal and child health including*
2 *expertise in breastfeeding, toxicology, and endocrinology.*

3 ~~(1) Eight members in total, shall have expertise in public~~
4 ~~health, environment, epidemiology, and biology.~~

5 ~~(2) The other eight members shall include those who have~~
6 ~~expertise in the special vulnerability of children, women of~~
7 ~~childbearing age, seniors, health affected groups, breastfeeding~~
8 ~~promotion, and other communities of concern and one of these~~
9 ~~members shall be a representative from industry.~~

10 ~~(b) The director, the secretary, the President pro Tempore of~~
11 ~~the Senate, and the Speaker of the Assembly shall each appoint~~
12 ~~four members of the panel. Each appointing officer shall appoint~~
13 ~~two members fulfilling the qualifications of paragraph (1) of~~
14 ~~subdivision (a) and two members fulfilling the qualifications of~~
15 ~~paragraph (2) of subdivision (a), except that one of the~~
16 ~~appointments of the secretary shall be the industry representative~~
17 ~~set forth in paragraph (2) of subdivision (a).~~

18 ~~(b) The director and the secretary shall appoint four members~~
19 ~~each.~~

20 (c) All members shall be appointed to the panel by July 1,
21 2007. Each member shall be appointed for a three-year term.
22 Members may be reappointed for additional terms without
23 limitation.

24 (d) The panel shall meet as often as it deems necessary, with
25 consideration of available resources, but at a minimum, twice a
26 year.

27 ~~(e) Subcommittees of the panel reflecting the composition of~~
28 ~~the community shall be formed to advise the panel regarding~~
29 ~~community-based biomonitoring activities.~~

30 *(e) Pursuant to Sections 71110 to 71113, inclusive, of the*
31 *Public Resources Code, the panel and the program shall utilize*
32 *the principles of the California EPA Environmental Justice*
33 *Strategy and Environmental Justice Action Plan that provide*
34 *opportunities for the state to develop policies on the specific*
35 *priorities of public participation and community capacity*
36 *building with meaningful stakeholder input. This strategy and*
37 *plan accord the highest respect and value to every individual and*
38 *community, by developing and conducting public health and*
39 *environmental protection programs, policies, and activities in a*
40 *manner that promotes equity and affords fair treatment,*

accessibility, and protection for all Californians, regardless of race, age, culture, income, or geographic location. This strategy and plan establish the framework for integrating public participation in this program. The department may utilize models used by boards, departments, and offices at the agency for community outreach pursuant to this section.

(f) Members of the panel ~~and any subcommittees~~ shall serve without compensation, unless program funding is made available for this purpose, but shall be reimbursed for travel and other necessary expenses incurred in the performance of their duties under this chapter.

(g) The panel shall make recommendations to the division and office regarding the design and implementation of the program, with the division and office retaining final decisionmaking authority. The panel shall review program priorities, draft protocols, study reports, outreach materials, and shall make recommendations to the secretary and the director regarding all of the following:

(1) Chemicals that are priorities for biomonitoring in California and communities where biomonitoring will take place.

(2) A review of how findings and reports are communicated prior to their release to participants, legislators, and the public.

(h) The panel shall consider the criteria and recommendations generated by the department's Biomonitoring Planning Project, the California Environmental Health Tracking Network, the California Environmental Health Tracking Program, the Environmental Health Tracking Planning Consortium, and relevant peer-reviewed studies, when making recommendations.

Article 3. Fiscal Provisions

105453. Any funds provided, shall be deposited into the Healthy Californians Biomonitoring Fund, which is hereby established within the State Treasury, for expenditure by the department and the agency, upon appropriation by the Legislature, for purposes of this chapter. Administrative costs associated with implementing the program established pursuant to this chapter in any fiscal year shall not exceed 15 percent of the total funds deposited into the fund for that fiscal year.

Article 4. Reporting

105459. (a) ~~By January 1, 2009, the department shall submit an interim report to the Legislature summarizing the activities of the program, including program descriptions, methodology, program outcomes, and assessment of the activities of the various biomonitoring functions conducted pursuant to this chapter. By January 1, 2010, the department shall submit a report to the Legislature regarding additional activities and recommendations for improving the program based on activities and findings to date. Every two years thereafter, in consultation with the panel, the department shall forward a report to the Legislature on the program, policy, and relevant interagency activities.~~

~~(b) By January 1, 2010, the department shall submit a report to the Legislature regarding additional activities and recommendations for improving the program based activities and findings to date. Every two years thereafter, in consultation with the panel, the department shall forward a report to the Legislature on the program, policy, and relevant interagency activities.~~

~~(e)~~

(b) The department shall provide the public access to information which they are required to release pursuant to the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code).

~~(d)~~

(c) The division and office shall disseminate biomonitoring findings to the general public via governmental and other Web sites in a manner that is understandable to the average person. All health and environmental exposure data shall be provided to the general public in a summary format to protect the confidentiality of program participants. Within 30 calendar days after the division releases its interim and final report to the Legislature, the reports shall be made available to the public.

CORRECTIONS:

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